

**AMENDMENTS TO THE CLAIMS**

1. (Previously presented) A fiber, wherein said fiber is produced by electrospinning and comprises at least one mesoporous molecular sieve, wherein the mesoporous molecular sieve is synthesized from a mesoporous precursor material, and said mesoporous precursor material is formed into a gel by combining a metal oxide and a surfactant.

2-3. (Canceled).

4. (Previously presented) The fiber of claim 1, wherein said metal oxide is selected from the group consisting of silicon dioxide, aluminum oxide, titanium dioxide, niobium oxide, tungsten oxide, tantalum oxide, vanadium pentoxide, indium tin oxide, calcium aluminate and mixtures thereof.

5. (Previously presented) The fiber of claim 1, wherein said fiber has a diameter ranging from about 10 nanometers up to about 1,000 nanometers

6. (Previously presented) A network of fibers wherein, said network comprises fibers comprising at least one mesoporous molecular sieve wherein, said fibers are produced by electrospinning, wherein the mesoporous molecular sieve is synthesized from a mesoporous precursor material, and said mesoporous precursor material is formed into a gel by combining a metal oxide and a surfactant.

7-8. (Canceled).

9. (Previously presented) The fibers of claim 6, wherein said metal oxide is selected from the group consisting of silicon dioxide, aluminum oxide, titanium dioxide, niobium oxide, tungsten oxide, tantalum oxide, vanadium pentoxide, indium tin oxide, calcium aluminate and mixtures thereof.

10-30. (Canceled)

31. (Previously presented) A method of making a network of fibers comprising:  
  
electrospinning a fiberizable material to form a network of fibers, wherein said fibers comprise

at least one mesoporous molecular sieve, wherein the mesoporous molecular sieve is synthesized from a mesoporous precursor material, and said mesoporous precursor material is formed into a gel by combining a metal oxide and a surfactant.

32-33. (Canceled)

34. (Previously presented) The method of claim 31, wherein said metal oxide is selected from the group consisting of silicon dioxide, aluminum oxide, titanium dioxide, niobium oxide, tungsten oxide, tantalum oxide, vanadium pentoxide, indium tin oxide, calcium aluminate and mixtures thereof.